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FILE 'USPATFULL' ENTERED AT 10:26:31 ON 06 JUL 2004  
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=> s atcc(2n)39149  
L1 16 ATCC(2N) 39149

=> dup rem l1  
PROCESSING COMPLETED FOR L1  
L2 12 DUP REM L1 (4 DUPLICATES REMOVED)

=> d 12 ibib abs tot

L2 ANSWER 12 OF 12 USPATFULL on STN  
ACCESSION NUMBER: 86:38190 USPATFULL  
TITLE: Antibiotic 13-384 complex from *Micromonospora*  
carbonacea var africana  
INVENTOR(S): Waitz, Jay A., Warren, NJ, United States  
Patel, Mahesh G., Verona, NJ, United States  
Marquez, Joseph A., Montclair, NJ, United States  
Kalyanpur, Manohar G., Winchester, MA, United States  
Horan, Ann C., Summit, NJ, United States  
PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4597968		19860701
APPLICATION INFO.:	US 1984-623266		19840621 (6)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1982-405822, filed on 6 Aug 1982, now abandoned		

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Goldberg, Jerome D.  
LEGAL REPRESENTATIVE: Hoffman, Thomas D., Rosen, Gerald S.  
NUMBER OF CLAIMS: 13  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)  
LINE COUNT: 753  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The antibiotic 13-384 complex is elaborated by a new variety of  
Micromonospora carbonacea; namely *Micromonospora* carbonacea var africana  
NRRL 15099.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 1 OF 12 USPATFULL on STN  
ACCESSION NUMBER: 2004:133296 USPATFULL  
TITLE: Everninomicin biosynthetic genes  
INVENTOR(S): Hosted, Thomas J., Summit, NJ, UNITED STATES  
Wang, Tim X., Roselle Park, NJ, UNITED STATES  
Horan, Ann C., Summit, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004101832	A1	20040527
APPLICATION INFO.:	US 2001-758759	A1	20010111 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-175751P	20000112 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SCHERING-PLough CORPORATION, PATENT DEPARTMENT (K-6-1, 1990), 2000 GALLOPING HILL ROAD, KENILWORTH, NJ, 07033-0530	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	55 Drawing Page(s)	
LINE COUNT:	2396	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB This invention is directed to nucleic acids which encode the proteins

of the nucleic acids and proteins to produce compounds exhibiting antibiotic activity based on the everninomycin structure. The DNA sequence for the gene clusters responsible for encoding everninomycin biosynthetic genes, which provide the machinery for producing everninomycin, are provided. Thus, this invention provides the nucleic acid sequences needed to synthesize novel everninomycin-related compounds based on everninomycin, arising from modifications of the DNA sequence designed to change glycosyl and modified orsellinic acid groups contained in everninomycin. A. *Micromonospora* site-specific integrase gene is also provided, which can be incorporated in a vector for integration into any actinomycete, and, particularly into *Monospora*. Thus, the invention further provides methods for introducing heterologous genes into an actinomycete chromosome using this particular vector.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 2 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2003:318620 USPATFULL

TITLE: Compositions and methods for identifying and distinguishing orthosomycin biosynthetic loci

INVENTOR(S): Farnet, Chris M., Outremont, CANADA

Zazopoulos, Emmanuel, Montreal, CANADA

Staffa, Alfredo, Saint-Laurent, CANADA

NUMBER	KIND	DATE
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US 2003224364	A1	20031204
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US 2002-107431	A1	20020328 (10)
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RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-769734, filed on 26 Jan 2001, PENDING
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NUMBER	DATE
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US 2001-279095P	20010328 (60)
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US 2001-279709P	20010330 (60)
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US 2001-285214P	20010420 (60)
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PRIORITY INFORMATION:

US 2001-279095P	20010328 (60)
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DOCUMENT TYPE:

US 2001-279709P	20010330 (60)
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FILE SEGMENT:

US 2001-285214P	20010420 (60)
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LEGAL REPRESENTATIVE: George A. Loud, LORUSSO & LOUD, 3137 Mount Vernon Avenue, Alexandria, VA, 22305

NUMBER OF CLAIMS: 25

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 13 Drawing Page(s)

LINE COUNT: 5494

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides compositions and methods useful to identify orthosomycin biosynthetic gene clusters. The invention also provides compositions and methods useful to distinguish everninomycin-type orthosomycin gene clusters and avilamycin-type orthosomycin gene clusters. An orthosomycin gene cluster may be identified using compositions of the invention such as hybridization probes, PCR primers derived from specific protein families responsible for the unique structural features that distinguish orthosomycins, everninomycin-type orthosomycins and avilamycin-type orthosomycins. An orthosomycin gene cluster may be identified using compositions of the invention such as the sequence code for the reference sequences stored on computer readable medium.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 12 MEDLINE on STN

DUPLICATE 1

ACCESSION NUMBER: 2003410675 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12949170

TITLE: Development of the *Micromonospora carbonacea* var. *africana* \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* bacteriophage pMLP1 integrase for site-specific integration in *Micromonospora* spp.

AUTHOR: Alexander Dylan C; Devlin David J; Hewitt Duane D; Horan Ann C; Hosted Thomas J

CORPORATE SOURCE: New Lead Discovery, Schering Plough Research Institute, 2015 Galloping Hill Road, K15-B425-MS4800, Kenilworth, NJ 07033, USA.

SOURCE: Microbiology (Reading, England), (2003 Sep) 149 (Pt 9) 2443-53.

PUB. COUNTRY: Journal code: 9430468. ISSN: 1350-0872. England: United Kingdom

LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: GENBANK-AY150027; GENBANK-AY150028; GENBANK-AY150029;  
GENBANK-AY150030; GENBANK-AY150031; GENBANK-AY150032;  
GENBANK-AY150033  
ENTRY MONTH: 200403  
ENTRY DATE: Entered STN: 20030903  
Last Updated on STN: 20040305  
Entered Medline: 20040304  
AB **Micromonospora carbonacea** var. *africana* \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*  
contains a temperate bacteriophage, pMLP1, that is present both as a replicative element and integrated into the chromosome. Sequence analysis of a 4.4 kb KpnI fragment revealed pMLP1 att/int functions consisting of an integrase, an excisionase and the phage attachment site (attP). Plasmids pSPRH840 and pSPRH910, containing the pMLP1 att/int region, were introduced into **Micromonospora** spp. by conjugation from *Escherichia coli*. Sequence analysis of DNA flanking the integration site confirmed site-specific integration into a tRNAHis gene in the chromosome. The pMLP1 attP element and chromosomal bacterial attachment (attB) site contain a 24 bp region of sequence identity located at the 3' end of the tRNA. Integration of pMLP1-based plasmids in *M. carbonacea* var. *africana* caused a loss of the pMLP1 phage. Placement of an additional attB site into the chromosome allowed integration of pSPRH840 into the alternate attB site. Plasmids containing the site-specific att/int functions of pMLP1 can be used to integrate genes into the chromosome.

L2 ANSWER 4 OF 12 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 2002:98239 BIOSIS

DOCUMENT NUMBER: PREV200200098239

TITLE: Characterization of the biosynthetic gene cluster for the oligosaccharide antibiotic, evernimicin, in **Micromonospora carbonacea** var. *africana* ATCC39149.

AUTHOR(S): Hosted, T. J. [Reprint author]; Wang, T. X.; Alexander, D. C.; Horan, A. C.

CORPORATE SOURCE: Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ, 07033, USA

SOURCE: Journal of Industrial Microbiology and Biotechnology, (December, 2001) Vol. 27, No. 6, pp. 386-392. print.  
ISSN: 1367-5435.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 24 Jan 2002  
Last Updated on STN: 25 Feb 2002

AB Evernimicin (EV) belongs to the orthosomycin class of antibiotics and consists of several modified L- and D-deoxysugars containing unusual orthoester and glycosyl linkages and two orsellinic acid groups, one that is halogenated. The EV biosynthetic gene cluster from **Micromonospora carbonacea** var. *africana* ATCC39149 was localized by hybridization to a dTDP-D-glucose 4,6-dehydratase probe and a 120-kb region containing the EV biosynthetic cluster and surrounding regions has been sequenced. BLAST analysis has identified a type I polyketide synthase for orsellinic acid biosynthesis as well as enzymes required for L- and D-deoxyglucose and D-deoxymannose synthesis. In addition, genes involved in glycosyltransfer and resistance were identified. Insertional mutations in several biosynthetic genes blocked EV production, indicating a role for these genes in EV biosynthesis.

L2 ANSWER 5 OF 12 USPATFULL on STN

ACCESSION NUMBER: 1998:98898 USPATFULL

TITLE: Water soluble antibiotics

INVENTOR(S): Girijavallabhan, Viyyoor M., Parsippany, NJ, United States

Sakseena, Anil K., Upper Montclair, NJ, United States

Bennett, Frank, Piscataway, NJ, United States

Jao, Edwin, Warren, NJ, United States

Patel, Naginbhai M., Piscataway, NJ, United States

Ganguly, Ashit, Upper Montclair, NJ, United States

PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5795874 19980818

APPLICATION INFO.: US 1996-770469 19961220 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-577656, filed on 22 Dec 1995, now patented, Pat. No. US 5652226

FILE SEGMENT: Granted  
PRIMARY EXAMINER: Ivy, C. Warren  
ASSISTANT EXAMINER: Aulakh, Charanjit S.  
LEGAL REPRESENTATIVE: Majka, Joseph T., Hoffman, Thomas D.  
NUMBER OF CLAIMS: 6  
EXEMPLARY CLAIM: 1  
LINE COUNT: 403

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The compound of the formula I ##STR1## wherein R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6, R.sup.7, and R.sup.8 are as defined herein, are described. These compounds are antibacterial agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 6 OF 12 USPATFULL on STN

ACCESSION NUMBER: 1998:79153 USPATFULL  
TITLE: Lipophilic oligosaccharide antibiotic compositions  
INVENTOR(S): Patel, Mahesh G., Verona, NJ, United States  
Gullo, Vincent P., Liberty Corner, NJ, United States  
Hare, Roberta S., Gillette, NJ, United States  
Loebenberg, David, Monsey, NY, United States  
Kwon, Heewon Y., Warren, NJ, United States  
Miller, George H., Montville, NJ, United States  
PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States  
(U.S. corporation)

NUMBER      KIND      DATE

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PATENT INFORMATION: US 5776912      19980707  
APPLICATION INFO.: US 1996-770470      19961220 (8)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Peselev, Elli  
LEGAL REPRESENTATIVE: Hoffman, Thomas D.  
NUMBER OF CLAIMS: 27  
EXEMPLARY CLAIM: 20,27  
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)  
LINE COUNT: 1179

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An aqueous pharmaceutical composition comprising a lipophilic oligosaccharide antibiotic salt, e.g., the N-methylglucamine salt of the everninomicin-type antibiotic of Formula III together with a binding agent such as human serum albumin or recombinant human albumin and a tonicity agent such as mannitol, is disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 7 OF 12 USPATFULL on STN

ACCESSION NUMBER: 97:66113 USPATFULL  
TITLE: Water soluble antibiotics  
INVENTOR(S): Girijavallabhan, Viyyoor M., Parsippany, NJ, United States  
Sakseña, Anil K., Upper Montclair, NJ, United States  
Bennett, Frank, Piscataway, NJ, United States  
Jao, Edwin, Warren, NJ, United States  
Patel, Naginbhai M., Piscataway, NJ, United States  
Ganguly, Ashit, Upper Montclair, NJ, United States  
PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States  
(U.S. corporation)

NUMBER      KIND      DATE

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PATENT INFORMATION: US 5652226      19970729  
APPLICATION INFO.: US 1995-577656      19951222 (8)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Richter, Johann  
ASSISTANT EXAMINER: Stockton, Laura L.  
LEGAL REPRESENTATIVE: Boxer, Matthew, Hoffman, Thomas D., Majka, Joseph T.  
NUMBER OF CLAIMS: 17  
EXEMPLARY CLAIM: 1  
LINE COUNT: 424

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The compound of the formula I ##STR1## wherein R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6, R.sup.7, and R.sup.8 are as defined herein, are described. These compounds are antibacterial agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5624914		19970429
APPLICATION INFO.:	US 1994-211700		19940412 (8)
	WO 1992-US8565		19921014
			19940412 PCT 371 date
			19940412 PCT 102(e) date

PRIMARY EXAMINER: Kight, John

ASSISTANT EXAMINER: white, E

ASSISTANT EXAMINER: WITNESS, EVERETT HOFFMAN. THE  
LEGAL REPRESENTATIVE:

LEGAL REPRESENTATIVE: Hoffman, Thomas D.  
NUMBER OF CLAIMS: 22

NUMBER OF CLAIMS: 22  
EXEMPLARY CLAIM: 1

**EXEMPLARY CLAIM.**  
**NUMBER OF DRAWINGS:**

NUMBER OF DRAWINGS: 1 DR  
LINE COUNT: 1351

LINE COUNT: 1351  
SAS INDEXING IS AVAILABLE FOR THIS DATASET

CAS INDEXING IS AVAILABLE FOR

AB Pharmaceutically acceptable compositions of matter comprising a lipophilic oligosaccharide antibiotic, e.g., the everninomicin-type antibiotic of Formula III, at least a stoichiometric amount of a base, e.g., N-methylglucamine, an amount of, e.g., hydroxypropyl-.beta.-cyclodextrin, and optionally a pharmaceutically acceptable non-ionic surfactant, e.g., Tween-80, pharmaceutical compositions containing such compositions of matter, methods of treating and preventing susceptible bacterial infections in animals especially human beings as well as a method of preventing adverse reaction syndrome while simultaneously delivering an antiinfective amount of a lipophilic oligosaccharide antibiotic such as that of Formula III to said animals as well as the use of the compositions of matter for the preparation of a medicament for such treating or preventing are disclosed. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4767748	19880830	
APPLICATION INFO.:	US 1986-900873	19860827	(6)
DISCLAIMER DATE:	20031111		
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1985-787405, filed on 15 Oct 1985, now patented, Pat. No. US 4622314		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Griffin, Ronald W.		
ASSISTANT EXAMINER:	Carson, Nancy S.		
LEGAL REPRESENTATIVE:	Hoffman, Thomas D., Rosen, Gerald S.		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	7		
LINE COUNT:	482		

402  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A Compound represented by formula I ##STR1## wherein R is hydrogen, or ##STR2## wherein R.sup.1 is N-acylamino, N-alkylamino, N,N-dialkylamino.

thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 12 USPATFULL on STN  
ACCESSION NUMBER: 88:21096 USPATFULL  
TITLE: *Micromonospora carbonacea var africana*  
INVENTOR(S): Waitz, Jay A., Portola Valley, CA, United States  
PATENT ASSIGNEE(S): Horan, Ann C., Summit, NJ, United States  
Schering Corporation, Kenilworth, NJ, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4735903		19880405
APPLICATION INFO.:	US 1986-845094		19860327 (6)
RELATED APPLN. INFO.:	Division of Ser. No. US 1984-623266, filed on 21 Jun 1984, now patented, Pat. No. US 4597968 which is a continuation-in-part of Ser. No. US 1982-405822, filed on 6 Aug 1982, now abandoned		

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Weimar, Elizabeth  
LEGAL REPRESENTATIVE: Hoffman, Thomas D., Rosen, Gerald S.  
NUMBER OF CLAIMS: 1  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)  
LINE COUNT: 695

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A new variety of *Micromonospora carbonacea*, namely *Micromonospora carbonacea var africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 12 USPATFULL on STN  
ACCESSION NUMBER: 86:63474 USPATFULL  
TITLE: Substituted oligosaccharide antibiotics  
INVENTOR(S): Ganguly, Ashit K., Upper Montclair, NJ, United States  
Sarre, Olga, Verona, NJ, United States  
Girijavallabhan, Viyyoor M., Parsippany, NJ, United States  
PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4622314		19861111
APPLICATION INFO.:	US 1985-787405		19851015 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Brown, Johnnie R.		
LEGAL REPRESENTATIVE:	Hoffman, Thomas D., Rosen, Gerald S., Miller, Stephen I.		
NUMBER OF CLAIMS:	15		
EXEMPLARY CLAIM:	9		
LINE COUNT:	292		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There is disclosed desevernitroso, acetamido, ethylamino and diethylamino derivatives of antibiotic 13-384 components 1 and 5 represented by the following formula ##STR1## wherein R is hydrogen, or ##STR2## wherein R.sup.1 is acetamide, ethylamine, diethylamine, N-hydroxylamino, nitroso or the pharmaceutically acceptable salts thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 12 USPATFULL on STN  
ACCESSION NUMBER: 86:38190 USPATFULL  
TITLE: Antibiotic 13-384 complex from *Micromonospora carbonacea var africana*  
INVENTOR(S): Waitz, Jay A., Warren, NJ, United States  
Patel, Mahesh G., Verona, NJ, United States  
Marquez, Joseph A., Montclair, NJ, United States  
Kalyanpur, Manohar G., Winchester, MA, United States  
Horan, Ann C., Summit, NJ, United States  
PATENT ASSIGNEE(S): Schering Corporation, Kenilworth, NJ, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4597968		19860701
APPLICATION INFO.:	US 1984-623266		19840621 (6)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1982-405822, filed on 6 Aug 1982, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Goldberg, Jerome D.		
LEGAL REPRESENTATIVE:	Hoffman, Thomas D., Rosen, Gerald S.		
NUMBER OF CLAIMS:	13		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10	Drawing Figure(s);	10 Drawing Page(s)
LINE COUNT:	753		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The antibiotic 13-384 complex is elaborated by a new variety of *Micromonospora carbonacea*; namely *Micromonospora carbonacea* var *africana* NRRL 15099.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d kwic tot

L2 ANSWER 1 OF 12 USPATFULL on STN

SUMM [0002] Everninomicin is an oligosaccharide antibiotic belonging to the orthosomycin group of antibiotics produced by *Micromonospora carbonacea* var. *africana* ( \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*, SCC 1413) and is useful as a human medicine. Everninomicin chemically consists of several glycosyl residues attached to modified orsellinic.

DETD [0146] The DNA sequence of the *Micromonospora carbonacea* var. *africana* ( \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* ) everninomicin biosynthetic region was obtained by sequencing inserts of recombinant DNA subclones containing contiguous or overlapping DNA segments of the.

L2 ANSWER 2 OF 12 USPATFULL on STN

DETD . . . var. *aurantiaca* NRRL 2997 is sometimes referred to as EVER, the biosynthetic locus for everninomicin from *Micromonospora carbonacea* var. *africana* ( \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*, SCC 1413) is sometimes referred to as EVEA, the biosynthetic locus for an avilamycin-like compound from *Streptomyces mobarensis* is sometimes . . .

L2 ANSWER 3 OF 12 MEDLINE on STN

TI Development of the *Micromonospora carbonacea* var. *africana* \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* bacteriophage pMLP1 integrase for site-specific integration in *Micromonospora* spp.

AB *Micromonospora carbonacea* var. *africana* \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* contains a temperate bacteriophage, pMLP1, that is present both as a replicative element and integrated into the chromosome. Sequence analysis. . .

L2 ANSWER 4 OF 12 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

ORGN Classifier

Actinoplanetes 08830

Super Taxa

Actinomycetes and Related Organisms; Eubacteria; Bacteria;  
Microorganisms

Organism Name

*Micromonospora carbonacea* var. *africana*: \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*

Taxa Notes

Bacteria, Eubacteria, Microorganisms

L2 ANSWER 5 OF 12 USPATFULL on STN

SUMM . . . of formula I' (compound 10 of Scheme I) may be obtained by fermentation of *Micromonospora carbonacea* var. *africana* NRRL 15099 \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* or, more preferably, by an improved strain thereof, obtained as described in WO 93/07904 published Apr. 29, 1993.

L2 ANSWER 6 OF 12 USPATFULL on STN

DRWD FIG. 1 graphically illustrates the progression, with time, of a typical fermentation of *Micromonospora carbonacea* var. *africana*, NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* .

DETD . . . ##STR10## are isolated from an antibiotic 13-384 complex produced by fermentation of the organism *Micromonospora carbonacea* var. *africana*, NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* . Antibiotic

DET D R.sub.4 and R.sub.5 are each defined as hereinabove in reference. . . .  
The preferred compound of the Formula III may be obtained by  
fermentation of *Micromonospora carbonacea* var. *africana* NRRL 15099,  
\*\*\*ATCC\*\*\* \*\*\*39149\*\*\* or, more preferably, by an improved strain  
thereof, obtained as hereinafter described.  
DET D Utilizing the strain SCC 1413 of the culture NRRL 15099, \*\*\*ATCC\*\*\*  
\*\*\*39149\*\*\*, the preferred compound of the Formula III may suitably be  
obtained by the procedures outlined in Example I of U.S.. . . .  
DET D We have developed an improved strain from SCC1413, NRRL 15099,  
\*\*\*ATCC\*\*\* \*\*\*39149\*\*\* using standard mutagenesis agents and  
obtained strains producing improved yields of the preferred  
everninomicin-type antibiotic compound of the Formula III. In a specific  
example, the parent strain SCC 1413, NRRL 15099, \*\*\*ATCC\*\*\*  
\*\*\*39149\*\*\* was exposed to an amount of the mutagenesis agent,  
N-nitrosoguanidine (NTG) sufficient to kill 90% of a culture of SCC  
1413, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*, NRRL 15099. Fifteen hundred  
surviving isolates were examined for enhanced biological activity  
against *S. aureus* and *E. coli* to determine. . . .

TABLE 6

Flask Comparison of SCC's 1413, 1631, 1756 and 2146

Strains of *Micromonospora Carbonacea*

var *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*

Titer of the compound of Formula III and

Nitroso Analog (1A) Thereof (.mu.g/ml)

Culture 1 (NO.sub.2)

1a (NO) combined (1 + 1a)

SCC 1413 5. . . .

DET D A 100 liter fermentation of strain SCC 2146 of *Micromonospora carbonacea*  
var. *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* improved as  
described hereinabove, was conducted in accordance with the procedures  
of Example 1 B of U.S. Pat. No. 4,597,968. . . .

L2 ANSWER 7 OF 12 USPATFULL on STN

DET D . . . of formula I' (compound 10 of Scheme I) may be obtained by  
fermentation of *Micromonospora carbonacea* var. *africana* NRRL 15099  
\*\*\*ATCC\*\*\* \*\*\*39149\*\*\* or, more preferably, by an improved strain  
thereof, obtained as described in WO 93/07904 published Apr. 29, 1993.

L2 ANSWER 8 OF 12 USPATFULL on STN

DRWD FIG. 1 graphically illustrates the progression, with time, of a typical  
fermentation of *Micromonospora carbonacea* var. *africana*, NRRL 15099,  
\*\*\*ATCC\*\*\* \*\*\*39149\*\*\* . . .

DET D . . . ##STR11## are isolated from an antibiotic 13-384 complex  
produced by fermentation of the organism *Micromonospora carbonacea* var.  
*africana*, NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* . Antibiotic  
components 1 (Formula II, X=NO.sub.2 and Y, R.sub.2, R.sub.3, R.sub.4  
and R.sub.5 are each defined as hereinabove in reference. . . .

DET D The preferred compound of the Formula III may be obtained by  
fermentation of *Micromonospora carbonacea* var. *africana* NRRL 15099,  
\*\*\*ATCC\*\*\* \*\*\*39149\*\*\* or, more preferably, by an improved strain  
thereof, obtained as hereinafter described.

DET D Utilizing the strain SCC 1413 of the culture NRRL 15099, \*\*\*ATCC\*\*\*  
\*\*\*39149\*\*\*, the preferred compound of the Formula III may suitably be  
obtained by the procedures outlined in Example 1 of U.S.. . . .

DET D We have developed an improved strain from SCC1413, NRRL 15099,  
\*\*\*ATCC\*\*\* \*\*\*39149\*\*\* using standard mutagenesis agents and  
obtained strains producing improved yields of the preferred  
everninomicin-type antibiotic compound of the Formula III. In a specific  
example, the parent strain SCC 1413, NRRL 15099, \*\*\*ATCC\*\*\*  
\*\*\*39149\*\*\* was exposed to an amount of the mutagenesis agent,  
N-nitrosoguanidine (NTG) sufficient to kill 90% of a culture of SCC  
1413, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*, NRRL 15099. Fifteen hundred  
surviving isolates were examined for enhanced biological activity  
against *S. aureus* and *E. coli* to determine which. . . .

TABLE 6

Flask Comparison of SCC's 1413, 1631, 1756 and 2146

Strains of *Micromonospora Carbonacea* var *africana* NRRL

15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*

Titer of the compound of Formula III and Nitroso Analog (1A)

Thereof (.mu.g/ml)

Culture 1 (NO.sub.2)

1a (NO) combined (1 + 1a)

DETD A 100 liter fermentation of strain SCC 2146 of *Micromonospora carbonacea* var. *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* improved as described hereinabove, was conducted in accordance with the procedures of Example 1B of U.S. Pat. No. 4,597,968 except. . .

L2 ANSWER 9 OF 12 USPATFULL on STN

SUMM . . . invention relates to anti-bacterially active derivatives of an antibiotic complex produced by *Micromonospora carbonacea* var *africana* var nov. NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*, which is designated antibiotic 13-384 in commonly assigned U.S. Pat. No. 4,597,968 which is incorporated herein by reference. This complex, . . .

L2 ANSWER 10 OF 12 USPATFULL on STN

AB A new variety of *Micromonospora carbonacea*, namely *Micromonospora carbonacea* var *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* .  
SUMM . . . under controlled conditions using a biologically pure culture of the new microorganism, *Micromonospora carbonacea* var *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* .  
DETD . . . of the collection of the American Type Culture Collection (ATCC) in Rockville, Md. where it has been assigned accession number \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* . Subcultures of *Micromonospora carbonacea* var *africana* \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* are available to the public without restriction. Use of the microorganism is dependent on U.S. Patent Laws.

DETD . . . variety of the species *Micromonospora carbonacea*. It is proposed that the culture be designated *Micromonospora carbonacea* var *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* . This strain is understood to be the type strain of the new variety.

DETD Culture characteristics of the microorganism, *Micromonospora carbonacea* var *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* on various standard media are reported in Table 5.

DETD Growth of the microorganism, NRRL 15099/ \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* on various carbon compounds is reported in Table 6.

DETD Physiologic characteristics of microorganism, NRRL 15099/ \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* are reported in Table 7.

DETD Whole cell analysis of the culture of the microorganism NRRL 15099/ \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* found mesodiaminopimelic acid, xylose and arabinose.

L2 ANSWER 11 OF 12 USPATFULL on STN

SUMM . . . invention relates to antibacterially active derivatives of an antibiotic complex produced by *Micromonospora carbonacea* var *africana* var nov. NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\*, which is designated antibiotic 13-384 in commonly assigned U.S. patent application Ser. No. 623,266, filed June 21, 1984, which application. . .

L2 ANSWER 12 OF 12 USPATFULL on STN

SUMM . . . under controlled conditions using a biologically pure culture of the new microorganism, *Micromonospora carbonacea* var *africana* var nov. NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* .

DETD . . . of the collection of the American Type Culture Collection (ATCC) in Rockville, Md. where it has been assigned accession number \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* . Subcultures of *Micromonospora carbonacea* var *africana* \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* are available to the public without restriction. Use of the microorganism is dependent on U.S. Patent Laws.

DETD . . . variety of the species *Micromonospora carbonacea*. It is proposed that the culture be designated *Micromonospora carbonacea* var *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* . This strain is understood to be the type strain of the new variety.

DETD Culture characteristics of the microorganism, *Micromonospora carbonacea* var *africana* NRRL 15099, \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* on various standard media are reported in Table 5.

DETD Growth of the microorganism, NRRL 15099/ \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* on various carbon compounds is reported in Table 6.

DETD Physiologic characteristics of microorganism, NRRL 15099/ \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* are reported in Table 7.

DETD Whole cell analysis of the culture of the microorganism NRRL 15099/ \*\*\*ATCC\*\*\* \*\*\*39149\*\*\* found mesodiaminopimelic acid, xylose and arabinose.

=>

---Logging off of STN---

=>  
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	38.91	39.54

STN INTERNATIONAL LOGOFF AT 10:34:11 ON 06 JUL 2004

L Number	Hits	Search Text	DB	Time stamp
25	3	(everninomicin adj3 biosynthesis) and gene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/06 11:30
-	3	(t and hosted).in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:34
-	5451	(t and wang).in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:30
-	112	(a and horan).in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:29
-	32	(ann and horan).in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:32
-	25	(tim and wang).in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:30
-	0	((t and hosted).in. ) and ((ann and horan).in. ) and ((tim and wang).in. )	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:32
-	4	(thomas and hosted).in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:34
-	1	((ann and horan).in. ) and ((tim and wang).in. ) and ((thomas and hosted).in. )	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:34
-	11	everninomicin and biosynthesis	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:35
-	7	everninomicin and biosynthesis and gene and (path or pathway)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:36
-	0	(everninomicin and biosynthesis and gene and (path or pathway)) not ((everninomicin and biosynthesis) or (everninomicin and biosynthesis and gene))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:36
-	11	everninomicin and biosynthesis and gene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:43
-	3	(everninomicin adj3 biosynthesis)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:50
-	1172	micromonospora	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:50

-	50	micromonospora adj2 carbonacea	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 10:51
-	30	everninomicin and (micromonospora adj2 carbonacea)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 11:06
-	1152	actinomycete	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 11:07
-	9	actinomycete and everninomicin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 11:07
-	72	everninomicin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/01 12:09